

AMENDMENT 3

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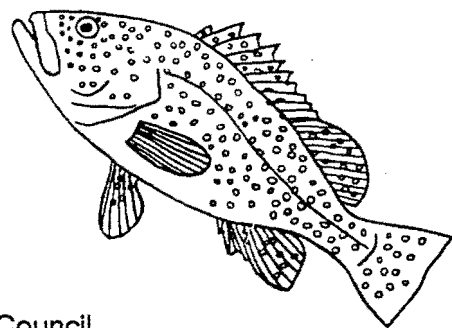
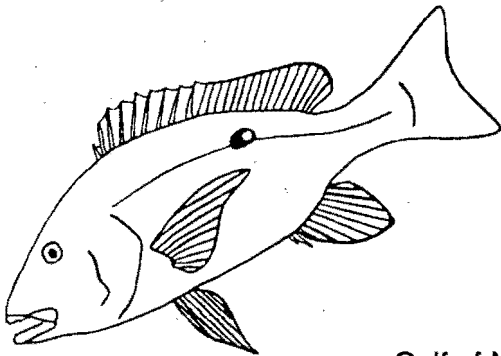
REEF FISH FISHERY MANAGEMENT PLAN

FOR THE REEF FISH RESOURCES OF

THE GULF OF MEXICO

*(Includes Environmental Assessment,  
Regulatory Impact Review, and  
Proposed Rule)*

FEBRUARY 1991



Gulf of Mexico Fishery Management Council  
Lincoln Center, Suite 881  
5401 West Kennedy Boulevard  
Tampa, Florida 33609

813-228-2815

## **1. HISTORY OF MANAGEMENT**

The Reef Fish Fishery Management Plan was implemented in November 1984. The implementing regulations, designed to rebuild declining reef fish stocks, included: (1) prohibitions on the use of fish traps, roller trawls, and powerhead equipped spear guns within an inshore stressed area; (2) a minimum size limit of 13 inches total length for red snapper; and (3) data reporting requirements.

The Council in 1990, through Amendment 1 to the Reef Fish Fishery Management Plan, implemented for red snapper a 7 fish recreational bag limit and a 3.1 million pound commercial quota. Together these measures were expected to reduce fishing mortality by 20 percent and begin rebuilding the population. However, analyses available to the Council during development of Amendment 1 indicated that additional red snapper harvest restrictions would be necessary in the future to achieve the 20 percent SPR goal by the year 2000. The Council also implemented a framework procedure (described in Section 4) for making annual management changes through a regulatory amendment accompanied by a regulatory impact review and environmental assessment.

At the direction of the Council, the Reef Fish Scientific Assessment Panel met in March and reviewed the 1990 NMFS Red Snapper Stock Assessment. The new assessment was based on recent findings that juvenile red snapper remain vulnerable to shrimp trawls for their first two years of life instead of just one year, as was previously assumed. The recommendation of the panel at that time was to close the directed fishery because the acceptable biological catch (ABC) was being harvested as bycatch of the shrimp trawl fishery. At the April Reef Fish Management Committee meeting it was recommended to the Council that, in conjunction with NMFS, a series of scientific meetings be held to review more thoroughly available data. Based on the results of the industry and scientific reviews plus public comment from 13 public hearings, the Council submitted a regulatory amendment to NMFS on October 15, 1990, proposing a 2.57 million pound quota, and a 6-fish per person daily recreational bag limit for red snapper, including a 50-percent reduction in shrimp trawl bycatch of juvenile red snapper by 1993, as the first such change proposed under the Amendment 1 framework procedure.

On November 1, 1990, National Marine Fisheries Service notified the Council it was holding the proposed action in abeyance until its recommendation could be reconsidered in light of recent amendments to the Magnuson Act and new information on potential errors in historical red snapper landings. The Council, at its meeting in November 1990, modified its previous proposal and resubmitted the regulatory amendment to NMFS on December 3, 1990, with recommendations for implementing a 2.0 million pound commercial quota, a 2-fish recreational bag limit for the 1991 fishing year, and a 50-percent reduction in shrimp trawl bycatch of juvenile red snapper by 1994. On January 3, 1990, NMFS again notified the Council it was not proceeding with implementation of the regulatory amendment until additional analyses could be further addressed pertaining to 1) alternative ways to reduce shrimp trawler bycatch of red snapper without violating recent amendments to the Magnuson Act; 2) geographical allocations of the recreational bag limit that consider past fishing practices and catches; 3) differential bag limits for various sectors of the recreational fishery; 4) seasonal closures of segments of the red snapper recreational fishery that might enable bag limits to increase during specific periods without exceeding anticipated harvest levels; 5) changes in size limits (including no size limit) that might lead to increased bag limits and quotas; and 6) deductions from the directed commercial landing quota to offset incidental fishing mortality after the commercial quota has been reached.

The Council intends to address the above items at its March 1991 meeting and to re-evaluate its previous recommendations for 1991 allocations.

In addition, upon petition from representatives of the Florida grouper fishery at the November 1990 Council meeting the Council requested on November 16, 1990, that the Secretary of Commerce implement an emergency rule to transfer speckled hind from the shallow-water grouper to the deep-water grouper complex, allowing the retention and landing of speckled hind for the remainder of the fishing year. The emergency action was implemented on December 12, 1990.

## **2. MANAGEMENT OBJECTIVE AND OPTIMUM YIELD**

The primary objective and definition of Optimum Yield for the Reef Fish Fishery Management Plan is to stabilize long term population levels of all reef fish species by establishing a certain survival rate of biomass into the stock of spawning age to achieve at least 20 percent spawning potential ratio.

### **Definition of Overfishing**

The following is the definition of overfishing contained in the Reef Fish Fishery Management Plan (FMP).

1. A reef fish stock or stock complex is overfished when it is below the level of 20 percent SPR.
2. When a reef fish stock or stock complex is overfished, overfishing is defined as harvesting at a rate that is not consistent with a program that has been established to rebuild the stock or stock complex to the 20 percent SPR level.
3. When a reef fish stock or stock complex is not overfished, overfishing is defined as a harvesting rate that if continued would lead to a state of the stock or stock complex that would not at least allow a harvest of optimum yield on a continuing basis (SPR).

## **3. PROBLEMS REQUIRING PLAN AMENDMENT**

The target date of January 1, 2000, established by Amendment 1 to the Reef Fish Fishery Management Plan for achieving 20 percent SPR is unattainable for red snapper. Consequently, the Council has proposed to modify the current target date to the year 2007 to rebuild the red snapper stock to optimum yield without closing the directed fishery.

The speckled hind (Kitty Mitchell) is a deep-water grouper species that was classified as a shallow-water species in Amendment 1. With closure of the shallow-water grouper fishery, significant quantities of speckled hind are being wasted because they are dead or moribund upon capture but cannot be landed. Consequently, the Council proposes to reclassify speckled hind as a deep-water grouper for quota monitoring purposes to prevent future reoccurrences of this loss.

#### 4. REEF FISH FRAMEWORK PROCEDURE AS SPECIFIED IN THE FMP

Optimum Yield (OY) can be achieved with annual total allowable catch (TAC) specifications for each species or species group. The Council has established a framework procedure where, on an annual basis, a scientific working group will establish an ABC range and the Council will set a TAC and prescribe fishing restrictions annually to attain the management goal of OY for implementation by the Regional Director (RD) of NMFS prior to the beginning of a fishing year.

##### **Procedure for Specification of TAC:**

1. Prior to April 1 each year or such other time as agreed upon by the Council and RD, the Southeast Fisheries Center of NMFS (SEFC) will: a) update or complete biological and economic assessments and analyses of the present and future condition of the stocks for red snapper and other reef fish stock or stock complex; b) assess to the extent possible the current SPR levels for each stock; c) estimate fishing mortality (F) in relation to F(20 percent SPR); d) estimate annual surplus production F(max) or other population parameters deemed appropriate; e) summarize statistics on the fishery for each stock or stock complex; f) specify the geographical variations in stock abundance, mortality, recruitment, and age of entry into the fishery for each stock or stock complex; and g) analyze social and economic impacts of any specification demanding adjustments of allocations, quotas, or bag limits.
2. The Council will convene a Scientific Stock Assessment Panel, appointed by the Council, that will, as a working group, review the SEFC assessment(s), current harvest statistics, economic, social, and other relevant data. It will prepare a written report to the Council specifying a range of ABC for each stock or stock complex which is in need of catch restrictions for attaining or maintaining OY. The ABCs are catch ranges that will be calculated for those species in the management unit that have been identified by the Council, NMFS, or the working panel as in need of catch restrictions for attaining or maintaining OY. The range of ABCs shall be calculated so as to achieve reef fish population levels at or above the 20 percent SPR goal by January 1, 2000. For stock or stock complexes where data in the SEFC reports are inadequate to compute an ABC based on the spawning stock biomass per recruit model, the above working group will use other available information as a guide in providing their best estimate of an ABC range that should result in at least a 20 percent SPR level. The ABC ranges will be established to prevent an overfished stock from further decline. To the extent possible a risk analysis should be conducted indicating the probabilities of attaining or exceeding the stock goal of 20 percent SPR, the annual transitional yields (i.e., catch streams) calculated for each level of fishing mortality within the ABC range, and the economic and social impacts associated with those levels. The working group report will include recommendations on bag limits, size limits, specific gear limits, season closures, and other restrictions required to attain management goals, along with the economic and social impacts of such restrictions, and the research and data collection necessary to improve the assessments. The working group may also recommend additional species for future analyses.
3. The Council will conduct a public hearing on the working group report(s) at, or prior, to the time it is considered by the Council for subsequent action. Other public hearings may also be held. The Council will request review of the report(s) by its Reef Fish Advisory Panel and Standing Scientific and Statistical Committees and may convene these groups to provide advice before taking action.

4. The Council in selecting a TAC level for each stock or stock complex for which an ABC range has been identified will, in addition to taking into consideration the recommendations provided for in (1), (2), and (3), utilize the following criteria:
  - a. Set TAC within or below the ABC range or set a series of annual TACs to obtain the ABC level within three years or less.
  - b. Subdivide the TACs into commercial and recreational allocations which maximize the net benefits of the fishery to the nation. The allocations will be based on historical percentages harvested by each user group during the base period of 1979-1987. However, if the harvest in any year exceeds the TAC due to either the recreational or commercial user group exceeding its allocation, subsequent allocations pertaining to the respective user group will be adjusted to assure meeting the January 1, 2000, spawning stock biomass per recruit (SPR) goal.
5. The Council will provide its recommendations to the RD for any specifications in TACs for each stock or stock complex, quotas, bag limits, trip limits, size limits, closed seasons, and gear restrictions necessary to attain the TAC, along with the reports, a regulatory impact review and environmental assessment of impacts, and the proposed regulations before October 15 or such other time as agreed upon by the Council and RD.
6. Prior to each fishing year or other such time as agreed upon by the RD and Council, the RD will review the Council's recommendations and supporting information; and, if he concurs that the recommendations are consistent with the objectives of the FMP, the National Standards, and other applicable law, he shall forward for publication notice of proposed TACs and associated harvest restrictions by November 1 or such other time as agreed upon by the Council and RD (providing up to 30 days for additional public comment). The RD will take into consideration all information received and will forward for publication in the Federal Register the notice of final rule by December 1 or such other time as agreed upon by the Council and RD.
7. Appropriate regulatory changes that may be implemented by notice action include:
  - a. The TACs for each stock or stock complex that are designed to achieve a specific level of ABC within the first year, or annual levels of TAC designed to achieve the ABC level within three years.
  - b. Bag limits, size limits, vessel trip limits, closed seasons or areas, gear restrictions, and quotas designed to achieve the TAC level.

## 5. SPAWNING POTENTIAL RATIO (SPR)

Spawning potential ratio is an index of a population's health as measured by the biological ability of the adult fish to produce spawn or eggs. A particular estimated level of SPR is directly dependent on the estimated number of living adult fish (or females) which in turn is controlled by the prevailing fishing mortality exerted on the population. This biological spawning ability can be measured in terms of total adult fish biomass (number alive x average weight), gonad biomass (number alive x average gonad weight), or eggs produced (number alive x average number of eggs spawned) for each age class of fish.

A generation of fish in a population must produce the same number of adult fish in the next generation for a population to persist without decline or, in other words, be in equilibrium. General population dynamics theory is based on the premise that populations tend to achieve levels of equilibrium given constant environmental conditions; however, environmental fluctuations prevent this from happening in most cases. Fishing reduces the number of adults surviving from a given number of recruits by reducing their life expectancy. As a consequence to prevent population collapse, the egg to recruit survival probability and/or the fecundities of the survivors must rise in response to the fishing-induced lowered abundance of adults (Goodyear 1989). Clearly, the above population mechanisms allow a population to be harvested without damaging its biological potential. However, as harvest pressure grows (fishing mortality increases), a point is reached where the population loses more fish through harvesting than it can replenish, and overfishing occurs. A population can also exist at an equilibrium level below its optimum level and can increase in size if fishing mortality is reduced.

Various measures of optimal fishing have been defined whereby fishing greater than the optimal level results in overfishing. The concepts of maximum sustainable yield (MSY) and maximum yield per recruit (YPR) are the two most common measures of optimal fishing. For reasons set forth in Amendment 1, the measure of optimal fishing for reef fish was chosen to be 20 percent SPR, which in a YPR context results in management advice similar to that needed to achieve maximum YPR.

Calculation of SPR is similar to calculation of YPR except, instead of attempting to maximize yield from a year class of fish, achieving a certain level of spawning potential is attempted. This spawning potential is estimated as the fraction or ratio of spawning ability of the species when being fished divided by the spawning ability of the species under conditions of no fishing mortality, i.e., only natural mortality occurs. The SPR of a population is then controlled by the fishing mortality exerted on each age class of fish.

## 6. ALTERNATIVE MANAGEMENT OPTIONS

### ACTION ONE: TARGET DATE

#### A. Preferred Alternatives

**Preferred Alternative 1: Establish a target date of January 1, 2007, for rebuilding the red snapper stock to 20 percent SPR.**

**Discussion:** This alternative changes the target date for rebuilding red snapper only; all other reef fish species maintain the target date of January 1, 2000, established in Amendment 1 to the Reef Fish FMP, unless modified under provisions of Preferred Alternative 2.

The target date of January 1, 2000, for achieving 20 percent SPR is unattainable for the red snapper fishery. Consequently, the Council has proposed to modify the target year to 2007 to provide a rebuilding schedule that can still rebuild the resource in a reasonable period. The November 1990 Regulatory Amendment, proposing a 2.0 million pound commercial quota, a 2-fish recreational bag limit, and a 50 percent reduction in shrimp trawl bycatch in 1994, would reach the goal in 2006.

Although the SPR goal could be reached in 2001 with a complete closure of the directed red snapper fishery beginning in 1991, and a 50 percent reduction in the shrimp trawl bycatch beginning in 1994, the Council chose to extend the target date to 2007 and allow catches to continue, but at a reduced rate, to lessen the social and economic burdens associated with a complete closure of the red snapper fishery.

Since projections of future stock size depend on assumptions of equilibrium conditions that usually do not exist in a marine environment, the Council proposed a target date of 2007 to provide sufficient flexibility to accommodate minor variations in population recovery. This alternative creates no direct biological, economic, or social impacts on the fishery or its environment because it establishes only an administrative guide to accompany the management actions proposed and evaluated through the framework regulatory amendment procedure established by Amendment 1.

**Preferred Alternative 2: Future changes to target dates that have been established for rebuilding overfished reef fish stocks to the 20 percent SPR goal may be respecified under the framework procedure at the time management action is proposed.**

**Discussion:** This alternative would provide for modification of the target date through the framework procedure established by Amendment 1. Since new data in future assessments or changes in the projection model will indicate that management adjustments are necessary to rebuild overfished stocks, it should be recognized that this new information may justify, or even necessitate, changing the target date. The purpose of the framework procedure is to allow timely management adjustments to changing conditions or scientific assessment advice. In this environment of constantly changing conditions, flexibility in adjusting the target date is needed to provide for timely management action.

The dynamics of reef fish resources, in general, are poorly known because of the paucity of biostatistical information, particularly regarding fishing effort, age and sex composition of the catch, maturity, fecundity, and the magnitude and spatiotemporal distribution of trawl bycatch. Despite the use of the best information available, the Council recognizes that considerable uncertainty accompanies stock assessments and, particularly, long-term resource projections. Substantially more data collection and research efforts are needed to understand the dynamics of the reef fish fisheries. In addition, the use of long-term projections for establishing annual management measures is fraught with difficulties; environmental influences and changes in fishing effort are not predictable.

The only population that is currently modeled to project a target date for rebuilding is red snapper. Since projected target dates for rebuilding red snapper are dependent on the parameters of the model, such as age structure, future advice to the Council on allowable biological catches will depend on parameter changes in the projection model and stock assessments. This alternative would allow the Council to respecify the target date in accordance with proposed management measures without having to initiate a separate plan amendment with a separate regulatory amendment just to accommodate changes in assessment advice. There are too many species in the reef fish complex that are, or could, become overfished and in need of rebuilding for the Council to continue to establish management measures such as bag and size limits, quotas, and trip limits through the framework procedure but be tied to establishing appropriate target dates by plan amendment.

This alternative provides flexibility to accommodate future changes in available data, prediction model parameters, and scientific advice and, therefore, would avoid the problems associated with choosing a fixed target date. As assessment advice on the condition of an overfished resource changes, that advice can be used not only to set management action for the following year, but also to respecify the target date for attainment of the goal. Since assessment advice can be expected to change as better information is obtained, it is reasonable for the Council to respecify a target date each time assessment advice changes substantially and new management action must be proposed to rebuild an overfished resource.

Management changes made through the framework procedure are effected as a regulatory amendment, complete with a regulatory impact analysis and environmental assessment. The NMFS, and the Secretary, retain authority to review and accept or reject a recommended change in any of the framework measures, including the target date, therefore this alternative ensures continued compliance with National Standard 1 and NMFS' guidelines for preventing overfishing and for establishing an acceptable rebuilding program for an overfished resource. The target date is just one component of the integrated management system envisioned by the Council in Amendment 1, and its omission as one of the framework measures was an oversight.

This alternative also allows the specification of separate rebuilding periods for each reef fish species at the time they are determined to be overfished. Not all species are overfished to the same degree and it may be possible to restore some more quickly than others.



**Preferred Alternative 3: An upper limit shall be established for the setting of target dates under the framework procedure such that a rebuilding period cannot exceed the time period equivalent to 1.5 times the biological generation time of the species under consideration.**

**Discussion:** This alternative constrains the choice of target date based on a particular biological characteristic of the species being managed; the generation time. Generation time is defined as the age at which the average female achieves half of her expected lifetime egg production. This alternative was chosen because it provides an objective basis for the specification of separate rebuilding periods for each reef fish species. The selection of a generation time multiple of 1.5 is somewhat arbitrary but appears to be a reasonable choice at this time. The biological life span of red snapper encompasses more than 30 ages and results in a generation time of about 14 years (the actual generation time for each species, including red snapper, is to be determined by the Reef Fish Stock Assessment Panel). An assumed generation time of 14 years may exist for red snapper which would indicate that future target dates could not exceed the year 2011 (14 years \* 1.5 generation time = 21 years), assuming a base starting year of 1990.

The Council chose this alternative because it provided for a biological constraint to the selection of target dates and prevents future framework changes to the target date beyond a fixed date, preventing the establishment of a changing goal as would occur with rejected alternative 2 below.

## **B. Rejected Alternatives**

**Rejected Alternative 1: Status quo -- Maintain the target date of January 1, 2000, that was established in Amendment 1 for rebuilding the red snapper stock to 20 percent SPR.**

**Discussion:** The target date of January 1, 2000, is, for all practical purposes, unattainable for red snapper. Given the constraint put on the Council by the most recent amendment to the MFCMA that prevents regulation of shrimp trawl bycatch before 1994, there are no actions that can be taken to restrict red snapper fishing mortality that will achieve the 20 percent SPR goal by the year 2000. Complete closure of the directed fishery in 1992, with reductions in shrimp bycatch ranging from 50 to 100 percent in 1994, would achieve 20 percent SPR in 2001. This alternative was rejected because of the unattainable limitations imposed by the target date of January 1, 2000.

**Rejected Alternative 2: Establish a target date to be some multiple, for example 1.0 - 1.5, of the length of a stock's modeled age structure. This alternative requires the selection of a specific year or range of years for a target date based on the characteristics of the population model used to project a species recovery period. For red snapper, which has a model age structure of 12 years (age classes 0,1,2, . . . ,11+), this alternative would establish a target date range of 2002 - 2008, equivalent to 1 - 1.5 times the age structure or 12 - 18 years from the baseline date of 1990.**

**Discussion:** This alternative provides for choice of a target date based on the characteristics of the model used to provide management advice. The projected rebuilding schedule for an overfished stock is dependent primarily on the age structure used in the projection model; for red snapper the age structure currently used is 12 years but can extend up to 30 years. Therefore, advice to the Council relative to ABC, which is constrained by a target date, can change dramatically depending

on the age structure used in future assessments. This alternative would resolve the problems associated with specifying a fixed target date without accounting for potential changes in the age structure used. However, this alternative would not accommodate other potential effects caused by changes in the stock assessment parameters not related to age structure.

Long-term projections with the current model indicate the red snapper stock can be rebuilt to 20 percent SPR within a time period equivalent to 1.5 times the length of its age structure with moderate reductions in fishing mortality. The target date of 2002, equivalent to a single multiple of the age structure, is projected to be achieved with a closure of the directed fishery and a 50 percent reduction in shrimp trawl bycatch in 1994 (similar to Rejected Alternative 1). The target date of 2008, equivalent to 1.5 times the age structure length, is projected to be achieved with a 2.57 million pound quota, a 4-fish recreational bag limit, and 50 percent reduction in trawl bycatch.

The important feature of this measure is that if the population model is changed through an extension of the age structure, the target date would automatically be extended so that the previously implemented management program would still achieve 20 percent SPR within the time period set by the new target date. Thus, instead of a model change forcing a change in the ABC and consequently more restrictive management measures because of a fixed target date, the model change would establish a new target date to accommodate the existing management program.

The Council rejected this alternative because it potentially could establish a constantly changing target date, and it would not account for other potential model changes that could affect the rebuilding period. Thus, this alternative may not sufficiently resolve the problem currently presented by a fixed target date, and the Council could again be forced into a plan amendment to change the target date.

### **Rejected Alternative 3: Have no target date for rebuilding overfished reef fish stocks.**

**Discussion:** There are concerns that the current data base for red snapper is insufficient at this time to instill a great deal of confidence in long-term projections (GMFMC 1990). Accompanying this uncertainty is the risk of making a management decision, based on long-term projections alone, that could have unnecessary and irretrievable negative social and economic impacts.

No long-term projections of population trends are available for the other reef fish species so consequently it may not be possible to determine their rebuilding progress with the SPR index relative to any target date. A means for projecting future recruitment is necessary to predict future population levels, and reliable stock-recruit relationships for conducting such projections are not available.

The Council has expressed its intention to monitor the red snapper population by evaluating annual stock assessments. If spawning stock size should decrease indicating the stock is not rebuilding as planned, the Council can adjust management measures as necessary to ensure that the red snapper stock continues to rebuild toward the goal of 20 percent SPR at an acceptable rate.

The Council rejected this alternative because NOAA General Counsel has advised that the guidelines require the specification of a recovery period for any overfished stock and the establishment of a target date was considered to provide a more focused management program.

## **ACTION TWO: SPECKLED HIND**

**Preferred Alternative:** Transfer the speckled hind (Kitty Mitchell) from the shallow-water quota category to the deep-water quota category.

**Discussion:** This action is necessary to prevent waste of a valuable resource. Currently, after the shallow-water grouper fishery closes, fishermen reported significant quantities of speckled hind being harvested in deep water that could not be retained and must be discarded dead. Because of the depths associated with their harvest all fish boated are affected by embolism and are not likely to survive upon release.

In Amendment 1 to the Reef Fish Fishery Management Plan speckled hind is included in the shallow-water grouper category. When the shallow-water grouper quota was filled and the inshore fishery closed on November 8, 1990, the fleet moved offshore to fish under the deep-water grouper quota and reported catches of large speckled hind as part of the snowy/misty/yellowedge deep-water grouper complex. Fishermen report that up to 30-40 percent of their deep-water harvest consist of speckled hind. Further evidence that this species is a deep-water fish can be found in the text "A Field Guide to Atlantic Coast Fishes of North America, 1989, Robins, C. R. and G. C. Ray, Houghton Mifflin Company," which identifies the speckled hind habitat as:

"Rocky ledges and sea mounts with good current, mainly at depths of about 180 m (600 feet). Page 133".

Unfortunately, landings of speckled hind have not been identified uniquely in the state or federal statistical landings reporting programs. Currently, speckled hind are categorized as "miscellaneous grouper" by Florida Department of Natural Resources (FDNR) and have been counted under the shallow-water quota. However, this problem will be corrected soon because a new FDNR species code list including speckled hind was available for use by wholesale dealers December 1, 1990. With this change in the FDNR landings reporting program, the identification of speckled hind landings will be much improved. Most harvest is landed in Florida because this species is rare in the northwestern Gulf (Hoese, H. D., and R. H. Moore, 1977, Fishes of the Gulf of Mexico: Texas, Louisiana, and Adjacent Waters, Texas A&M Press, Page 172), and is restricted to offshore hard bottoms east of the Mississippi Delta area (Walls, J. G., 1975, Fishes of the Northern Gulf of Mexico, T.F.H. Publications, Inc., Page 170).

**Rejected Alternative:** Status quo -- Maintain speckled hind as a shallow-water grouper.

**Discussion:** The Council rejected this alternative because it resulted in continued wastage of a fishery resource. Currently, once the shallow-water grouper fishery closes, significant quantities of speckled hind are discarded dead because of the depths associated with their harvest. Very few speckled hind appear to be taken in shallow water, and consequently, all fish boated are affected by embolism and are not likely to survive upon release.

## 7. ENVIRONMENTAL ASSESSMENT

### **Environmental Consequences**

#### **A. Physical Environment**

To the extent that can be ascertained, the action proposed in this amendment will have no impact on the physical environment.

#### **B. Fishery Resource**

The changes to the process for modifying the target date proposed in this amendment are necessary for more timely management as intended by the establishment of the framework procedure under Amendment 1. These changes will provide improved monitoring and management of overfished reef fish stocks. The change in target date for red snapper from January 1, 2000, to January 1, 2007, is necessary because the year 2000 goal is unattainable. The 2007 target date accommodates the currently proposed action of a 2.0 million pound commercial quota and a 2-fish recreational bag limit that was submitted to NMFS and will be implemented by regulatory amendment. Subsequent respecification of target dates for reef fish under the framework measure would be based on scientific advice from the Scientific Assessment Panel.

The action to reclassify speckled hind as a deep water grouper will not result in increased fishing mortality, but would only assure that the resource that is harvested is utilized. The Council believes that the potential waste could be substantial with status quo and should not be allowed to continue.

#### **C. Human Environment**

The change in the target date for red snapper will allow continuation of a directed fishery while rebuilding the overfished stock to optimum yield levels and thus be beneficial to the fishing industry. The changes in the process for future modifications to the target date will provide for more timely management and greater benefits to the industry.

Historically speckled hind have not been aggregated in the landings data. However, beginning in 1991, speckled hind will be uniquely identified through the Florida Trip Ticket System; few speckled hind are landed outside of Florida. As the landings data on speckled hind are accumulated, there may be adjustments to the allowable shallow- and deep-water grouper quotas.

#### **D. Effect on Endangered Species and Marine Mammals**

NOAA has initiated consultation under Section 7 of the Endangered Species Act regarding the impact of this proposed action on endangered and threatened species. A biological opinion resulting from that consultation found that neither the directed fisheries nor the proposed action will jeopardize the recovery of endangered or threatened species or their critical habitat.

#### **E. Effect on Wetlands**

The proposed action will have no effect on flood plains, wetlands, or rivers.

#### F. Mitigating Measures Related to the Proposed Action

This amendment provides for timely management of the reef fish stocks and monitoring capability to rebuild overfished stocks. The change in the red snapper target date provides for continuation of the directed fishery and provides benefits to both the commercial and recreational fisheries.

Speckled hind are being transferred to the deep-water grouper category because most of them are taken in waters of 100 fathoms or greater. Fish taken from such depths invariably are dead when they reach the surface; however, because they are included in the shallow-water grouper category retention of these fish presently is illegal once the shallow-water grouper quota has been met and the shallow-water fishery is closed. This results in the waste of a resource that would otherwise have food and market value.

#### G. Unavoidable Adverse Affects

The modifications to the target date and the process for future changes in the target date and the reclassification of speckled hind to the deep-water grouper category do not create unavoidable adverse affects.

#### H. Irreversible and irretrievable commitments of resources

There are no irreversible commitments of resources caused by implementation of this amendment.

### **Finding of No Significant Environmental Impact**

The proposed amendment is not a major action having significant impact on the quality of the marine or human environment of the Gulf of Mexico. The proposed action is an adjustment of the original regulations of the FMP to set a target date for rebuilding overfished reef fish stocks as set forth in Amendment 1. The proposed action should not result in impacts significantly different in context or intensity from those described in the environmental impact statement and environmental assessment published with the regulations implementing the FMP and Amendment 1.

Having reviewed the environmental assessment and available information relative to the proposed actions, I have determined that there will be no significant environmental impact resulting from the proposed actions. Accordingly, the preparation of a formal environmental impact statement on these issues is not required for this amendment by Section 102(2)(c) of the National Environmental Policy Act or its implementing regulations.

Approved: \_\_\_\_\_

Assistant Administrator for Fisheries

\_\_\_\_\_  
Date

#### **RESPONSIBLE AGENCY:**

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## **8. OTHER APPLICABLE LAW**

### **Impacts on Other Fisheries**

Data available to the Council indicate this amendment will have no impacts on other fisheries.

### **Habitat Concerns**

Reef fish habitats and related concerns were described in the FMP and Amendment 1.

### **Vessel Safety Considerations**

There are no fishery conditions, management measures, or regulations contained in this amendment that would result in the loss of harvesting opportunity because of crew and vessel safety effects of adverse weather or ocean conditions. No concerns have been raised by the people engaged in the fishery or the Coast Guard that the proposed management measures directly or indirectly pose a hazard to crew or vessel safety under adverse weather or ocean conditions. Therefore, there are no procedures for making management adjustments in the amendment due to vessel safety problems because no person will be precluded from a fair or equitable harvesting opportunity by the management measures set forth.

No vessel will be forced to participate in the fishery under adverse weather or ocean conditions as a result of the imposition of management regulations set forth in this amendment. Therefore, no management adjustments for fishery access will be provided. There are no procedures proposed to monitor, evaluate, and report on the effects of management measures on vessel or crew safety under adverse weather or ocean conditions.

### **Coastal Zone Consistency**

Section 307(c)(1) of the Federal Coastal Zone Management Act of 1972 requires that all federal activities which directly affect the coastal zone be consistent with approved state coastal zone management programs to the maximum extent practicable. The proposed changes in federal regulations governing reef fish in the EEZ of the Gulf of Mexico will make no changes in federal regulations that are inconsistent with either existing or proposed state regulations.

While it is the goal of the Council to have complementary management measures with those of the states, federal and state administrative procedures vary and regulatory changes are unlikely to be fully instituted at the same time.

This amendment is consistent with the Coastal Zone Management programs of the states of Alabama, Florida, Louisiana, and Mississippi to the maximum extent possible; Texas does not have an approved Coastal Zone Management program. This determination has been submitted to the responsible state agencies under Section 307 of the Coastal Zone Management Act administering approved Coastal Zone Management programs in the states of Alabama, Florida, Mississippi, and Louisiana.

## **Paperwork Reduction Act**

The purpose of the Paperwork Reduction Act is to control paperwork requirements imposed on the public by the federal government. The authority to manage information collection and record keeping requirements is vested with the Director of the Office of Management and Budget. This authority encompasses establishment of guidelines and policies, approval of information collection requests, and reduction of paperwork burdens and duplications.

The Council proposes, through this amendment, to establish no additional permit or data collection programs, therefore, no reporting burden on the public or cost to the government will be incurred through this amendment.

## **Federalism**

No federalism issues have been identified relative to the actions proposed in this amendment and associated regulations. The affected states have been closely involved in developing the proposed management measures and the principal state officials responsible for fisheries management in their respective states have not expressed federalism related opposition to adoption of this amendment. Therefore preparation of a federalism assessment under Executive Order 12612 is not necessary.

## **9. SCIENTIFIC RESEARCH AND DATA NEEDS**

The following scientific research and data needs have been identified with assistance from the scientific and industry advisory panels.

### **Biological Needs**

- a statistically designed survey to evaluate the magnitude of red snapper bycatch in the trawl fisheries and its impact on the red snapper population
- estimates of release mortality rates
- evaluate shrimp bycatch data from the Texas Parks and Wildlife shrimp survey
- further analysis of SEAMAP and groundfish survey length frequencies and catch rates
- an index of spawning stock size
- fecundity and maturity by age information
- evaluation of the current and historical levels of offshore trawling vessels fishing the Gulf and fishing effort by geographical area and water depth
- a statistically designed survey of bycatch reduction from each of the approved TEDs
- determine natural mortality rate(s), especially for juvenile fish

### **Socioeconomic Needs**

- identify levels of participation in the reef fish multi-species fishery
- local and regional economic assessment of the shrimp bycatch and impacts of restricting bycatch
- a detailed sociological study of the Gulf of Mexico reef fish fishery
- relevant social variables added to the MRFSS data collection program currently maintained by NMFS to provide an understanding of red snapper anglers
- special studies to address decision making behavior of user groups regarding various regulatory alternatives for decision makers to consider and implement more palatable regulations
- descriptive studies of the commercial red snapper fishery and their communities
- documenting variability within recreational and commercial fisheries regarding harvest, profitability, motivations, and satisfactions

### **Social Impact Assessment Needs**

The Council has two sociologists on the Reef Fish Scientific Assessment Panel to provide advice on social impacts of potential management action. However their participation cannot and should not be regarded as a substitute for a relevant social impact research program sponsored by the National Marine Fisheries Service.

Social scientists are concerned with knowing about the composition of marine fisheries (recreational and commercial), how they are organized in groups and how they will likely react to proposed changes in the management regime. In addition to demographic characterizations of fisheries, it is important to understand patterns of participation and how proposed changes will impact their livelihood and lifestyle. From a recreational standpoint, we are interested in variation in the angler population with regard to benefits sought and satisfaction. We are interested in impacts on peoples and their communities over time in order to understand displacement of user groups and succession in fisheries. By observing and monitoring how segments of the marine fisheries industry differentially cope and adapt to management actions over time, more effective implementation and management is possible.

While the Magnuson Fishery Conservation and Management Act mandates an understanding of the social impacts of fisheries management, little research data is available to managers regarding red snapper or any other Gulf fishery for that matter. Currently, there is no social research program in support of fisheries management within NMFS. Furthermore, there is considerable misunderstanding of the social component relative to the component of marine fisheries management. These two components should not be in opposition; rather, they should provide an inextricable tie between understanding social impacts and achieving biological goals. When decision makers lack a predictive understanding of what is palatable to various segments of the fishery and lose the ability to reach a negotiated allocation, resource protection goals may not be achieved. Also, without an understanding of management measures palatable to various user groups, scientific



assessment panels may be less than effective in providing decision assistance to the Gulf Council. Acquisition of appropriate research data will require support on a continuing basis, not as a "single-shot band aid" whenever management decisions reach a crisis level that demands social input.

Finally, there is the matter of what we know or do not know about the social component of the Gulf of Mexico reef fish fishery. There are no previous social studies regarding the commercial fishery, the recreational private-boat fishery, and the recreational charter/party boat angler fishery. We have little understanding of how these various groups will be impacted by the proposed management scenarios or how they will respond in their fishing activity. Methodologies exist to explore these matters but have never been supported in the past. From a MARFIN research project completed in the last three years regarding the charter and party boat industry in the Gulf of Mexico, we know something about the distribution of these two fisheries in the United States, the likelihood of their being impacted by rulemaking and how important red snapper is to their respective boat operations. Major "hotspots" for the Gulf of Mexico charter boat fishery would be Texas, Alabama and Florida where 11 of 26 boats (42%), 15 of 32 boats (47%), and 128 of 536 boats (24%), respectively, that target snapper (all species), target them equal to or more than 50 percent of the time. In Texas, 16 of the 16 party boats that target snapper (all species), did so more than 50 percent of the time. In Florida, over one-half (32 of 58) of the headboats that targeted snapper (all species), did so equal to or more than 50 percent of the time. We have no information on what these operators are likely to do in the face of new regulations and/or closure. Some operators reported that they favored bag limits over size limits.

Social impacts assessment information must be collected prior to crisis conditions developing. Social scientists need feedback regarding likely management needs so appropriate studies can begin now. Research funding support must be made available to achieve the goals specified in the Magnuson Fishery Conservation and Management Act.

## 10. REFERENCES

Goodyear, C. P. 1988. Recent trends in the red snapper fishery of the Gulf of Mexico. Unpublished report CRD 87/88-16. Available from National Marine Fisheries Service, Southeast Fisheries Center, Miami Laboratory, 75 Virginia Beach Drive, Miami, Florida 33149.

Goodyear, C. P., and P. Phares. 1990. Status of red snapper stocks of the Gulf of Mexico: Report for 1990. Unpublished report CRD 89/90-05. Available from National Marine Fisheries Service, Southeast Fisheries Center, Miami Laboratory, 75 Virginia Beach Drive, Miami, Florida 33149.

Gulf of Mexico Fishery Management Council (GMFMC). 1990. Regulatory Amendment of the reef fish fishery management plan: October 1990. Unpublished report available from the Gulf of Mexico Fishery Management Council, Suite 881, Lincoln Center, 5401 West Kennedy Boulevard, Tampa, Florida 33609.

Nichols, S. (editor). 1990a. Report of the workshop to evaluate potential management alternatives for reducing directed effort and shrimp trawl bycatch of red snapper. Workshop held at National Marine Fisheries Service, Pascagoula Laboratory, May 15-17, 1990. Unpublished report available from the Gulf of Mexico Fishery Management Council, Suite 881, Lincoln Center, 5401 West Kennedy Boulevard, Tampa, Florida 33609.

Nichols, S. 1990b. The spatial and temporal distribution of the bycatch of red snapper by the shrimp fishery in the offshore waters of the U.S. Gulf of Mexico. Unpublished report available from National Marine Fisheries Service, Southeast Fisheries Center, Mississippi Laboratories, Pascagoula Facility, Post Office Drawer 1207, Pascagoula, Mississippi 39568-1207.

Reef Fish Scientific Assessment Panel (RFSAP). 1990. Final report of the reef fish assessment panel, June 1990. Panel meeting held at National Marine Fisheries Service, Miami Laboratory, June 19-21, 1990. Unpublished report available from the Gulf of Mexico Fishery Management Council, Suite 881, Lincoln Center, 5401 West Kennedy Boulevard, Tampa, Florida 33609.

## 11. PUBLIC REVIEW

A total of five public hearings were scheduled to obtain public comments on this plan amendment with one of the hearings to be held during the Gulf Council meeting on Wednesday, January 23, 1991, in Houston, Texas. Copies of this Amendment and the associated Regulatory Impact Review may be obtained from the Gulf of Mexico Fishery Management Council office, 5401 West Kennedy Boulevard, Suite 881, Tampa, Florida 33609, 813-228-2815.

The public hearings, with the exception of the one conducted during the Council meeting, were held at the following dates and places:

### Monday, December 10, 1990

Pinellas County Cooperative  
Extension Service  
12175 125th Street North  
Largo, Florida

### Tuesday, December 11, 1990

Mobile Civic Center  
401 Civic Center Drive  
Mobile, Alabama

### Wednesday, December 12, 1990

Powell Auditorium  
Nichols State University  
Thibodaux, Louisiana

### Thursday, December 13, 1990

Moody Civic Center  
2102 Seawall Boulevard  
Galveston, Texas

## LIST OF AGENCIES AND PERSONS CONSULTED

Gulf of Mexico Fishery Management Council: Scientific and Statistical Committee  
Reef Fish and Shrimp Advisory Panels  
Reef Fish Scientific Assessment Panel

Coastal Zone Management Programs: Louisiana  
Mississippi  
Alabama  
Florida

National Marine Fisheries Service: Southeast Fisheries Center  
Southeast Regional Office

**APPENDIX**

**REGULATORY IMPACT REVIEW**

**FOR**

**PLAN AMENDMENT 3**

**TO THE**

**REEF FISH FISHERY MANAGEMENT PLAN**

**FEBRUARY 1991**

**GULF OF MEXICO FISHERY MANAGEMENT COUNCIL  
LINCOLN CENTER, SUITE 881  
5401 WEST KENNEDY BOULEVARD  
TAMPA, FLORIDA 33609  
831-228-2815**

## 1. INTRODUCTION

The National Marine Fisheries Service (NMFS) requires a Regulatory Impact Review (RIR) for all regulatory actions that are of public interest. The RIR does three things: 1) it provides a comprehensive review of the level and incidence of impacts associated with a proposed or final regulatory action, 2) it provides a review of the problems and policy objectives prompting the regulatory proposals and an evaluation of the major alternatives that could be used to solve the problem, and 3) it ensures that the regulatory agency systematically and comprehensively considers all available alternatives so that the public welfare can be enhanced in the most efficient and cost effective way.

The RIR also serves as the basis for determining whether any proposed regulations are major under criteria provided in Executive Order 12291 (E.O. 12291) and whether the proposed regulations will have a significant economic impact on a substantial number of small entities in compliance with the Regulatory Flexibility Act of 1980 (RFA).

This RIR analyzes the probable impacts that the proposed alternatives for the Reef Fish Fishery Management Plan (FMP) would have on the commercial and recreational directed red snapper fishery.

## 2. LONG-TERM GOAL OF FISHERY MANAGEMENT

The Council adopted Optimum Yield (OY) as the long-term goal in the fishery. The Reef Fish Fishery Management Plan defines OY as "... any harvest level for each species [of reef fish] which maintains, or is expected to maintain, over time a survival rate of biomass into the stock of spawning age to achieve at least a 20 percent spawning potential ratio (SPR), relative to the SPR that would occur with no fishing." In this sense, the Council's long-term program is to achieve **any** harvest level subject to a constraint of at least a 20 percent SPR.

Pursuant to NMFS guidelines (CFR Part 602.11), the Council also adopted an overfishing definition as follows:

1. A reef fish stock or stock complex is overfished when it is below the level of 20 percent of the spawning stock biomass per recruit that would occur in the absence of fishing.
2. When a reef fish stock or stock complex is overfished, overfishing is defined as harvesting at a rate that is not consistent with a program that has been established to rebuild the stock or stock complex to the 20 percent spawning stock biomass per recruit level.
3. When a reef fish stock or stock complex is not overfished, overfishing is defined as a harvesting rate that if continued would lead to a state of the stock or stock complex that would not at least allow a harvest of OY on a continuing basis."

### 3. PROBLEM IN THE FISHERY

Many reef fish species are currently "overfished." Red snapper, for one, has been overfished at least since 1984 (RFSAP, 1990). The Council recognized this problem in Amendment 1, and consequently adopted the objective of rebuilding the reef fish stock complex. The rebuilding target consists of two components-- a minimum SPR level of 20 percent, and a rebuilding period that ends by the year 2000. The Council accordingly proposed various restrictive measures (now in effect) on several reef fish species. It also established a procedure to revise annually the Total Allowable Catch (TAC) for each species or species group. Although the Council can set any TAC level it deems appropriate, it has to choose one that is within or below a range of Allowable Biological Catch (ABC) starting in 1993. The ABC range is to be established by a scientific stock assessment panel.

The most recent assessment of the red snapper stock indicates that achieving the Council's rebuilding target for red snapper would require stringent restrictions on both the red snapper and shrimp fisheries. These restrictions would result in substantial negative social and economic impacts on fishery participants during the rebuilding period, and long-term benefits from these measures could not outweigh short-term losses.

In a recent regulatory amendment, the Council proposed to set the 1991 TAC for directed red snapper harvest at approximately 65 percent of the 1990 TAC through a 2.0 MP commercial quota and a 2 fish recreational bag limit. It also proposed to reduce bycatch by 50 percent in 1994. The NMFS, however, decided not to implement the proposed measures until analysis of certain issues is considered by the Council. Although this proposal would have relatively less negative impacts on the fishery participants at least before 1994, it could not achieve the stock rebuilding target for red snapper.

Presently, the general problem in the management of red snapper involves the balancing of the stock recovery rate with the degree of negative impacts on the fishery participants. The stock recovery rate is inversely related to short-term negative impacts but directly related to long-term positive impacts on fishery participants.

The range of management alternatives is a function of the nature of the general problem. The nature of the problem is determined by the following: 1) knowledge of the red snapper and shrimp fisheries, 2) stock rebuilding target, and 3) available measures to effect bycatch reduction. Knowledge of the red snapper stock is continually updated through an annual stock assessment. Past stock assessments have served as guides to Council actions. In conjunction with the TAC setting for 1991, the Council proposes a 50 percent reduction in bycatch but sets this target to be effective beginning in 1994. An earlier date for bycatch reduction is prohibited by a recent Congressional action. This particular Plan Amendment addresses the stock rebuilding target date.

### 4. MANAGEMENT MEASURES

Although the proposed measures do not have direct impacts on fishery participants, the choice of a rebuilding target constrains the Council's choice of management measures that will have direct impacts on resource users. When more specific measures are proposed later under a regulatory amendment, their economic impacts will be subsequently estimated and analyzed. For the present

purpose, a possible regulatory measure that may be adopted under each of the proposed alternatives is analyzed to enable comparison of the relative costs and benefits of each option. The particular measure analyzed for each option is only one of many that can achieve the target SPR for a particular target year. Only impacts of measures affecting the red snapper fishery are quantified. No adequate information for other species exists to allow quantification of impacts.

## 5. ANALYSIS OF IMPACTS

### 5.1. Target Date for Rebuilding Reef Fish Stocks

#### 5.1.1. General Discussion of Preferred and Rejected Measures

Preferred Alternative 1: Establish a target date of January 1, 2007 for rebuilding red snapper stock to 20 percent SPR.

Relative to the current target of 20 percent SPR by the year 2000, this option provides the Council with greater flexibility than the status quo in balancing the achievement of the recovery rate and the economic consequences of regulatory measures. It is not precisely known to what extent this rebuilding period exposes the stock to greater likelihood of collapse, especially if initial TACs are set at relatively high levels. If the risk of stock collapse is higher under this alternative, both short- and long-term losses can result. To avoid this eventuality, a frequent monitoring of the fishery will be required. This appears to be feasible for red snapper.

Extension of the rebuilding period for stock recovery would allow a TAC that is higher than that allowable under the status quo. Under this scenario, the short-term profitability of the commercial sector and benefit level of the recreational sector may be higher relative to the status quo. This, of course, means that higher benefits from a fully recovered stock are postponed.

Preferred Alternative 2: Future changes to target dates that have been established for rebuilding overfished reef fish stocks to the 20 percent SPR goal may be respecified under the framework procedure at the time management action is proposed.

Fishermen target many reef fish species simultaneously at varying degrees. At the same time, several reef fish stocks are currently at different levels relative to their respective overfishing condition. Also, some species may be more resilient than others to fishery exploitation. Thus, forcing one rebuilding period for all reef fish species as currently adopted in the Reef Fish Management Plan could have undue impacts on some stocks and on the fishermen. This particular option, on the contrary, can address these impacts on a more appropriate manner, particularly as more information about the species and fishing industry becomes available. To some extent, the problem of balancing the recovery rate and the economic consequences of associated management measures can be addressed in a way that befits the biology of and industry dependence on a reef fish species.

While this option offers management flexibility, there are accompanying problems. In balancing the negative impacts on fishery participants and recovery of the stock, more weight may be given to one or the other based on short-term fluctuations in the status of the stock or knowledge of the

fishery. It is possible that if a reef fish species has been severely overfished since the last setting of a recovery target date, the rebuilding period may be lengthened to avoid imposing stringent restrictions on harvest. Such action could sacrifice long-term gains for lesser short-term losses since recovery would be less likely. Conversely, a shorter period could be chosen to rebuild the stock that would require imposing stringent restrictions. Under this latter scenario, the long-term gains may be more than enough to cover short-term losses. However, under an open access system of management, the projected future gains will be eventually dissipated as more effort is applied on the stocks. In addition, the distribution of gains may not favor those who incurred the initial losses.

**Preferred Alternative 3:** An upper limit shall be established for the setting of target dates under the framework procedure such that a rebuilding period cannot exceed the time period equivalent to 1.5 times the biological generation time of the species under consideration.

This option specifically ties the maximum rebuilding period to the biology of a reef fish species. To some extent, this addresses the concern that the target period may be modified on the basis of short-term fluctuations in the stock.

One major problem posed by this option is the choice of an appropriate numerical multiple (1.5 in the present case) applied on a stock's generation time. One multiple may be appropriate for one species, say red snapper, but its application to another species may be problematic in terms of achieving an "acceptable" balance between the rebuilding period and economic consequences of measures embedded in the target period for rebuilding the stock. The specific biological and economic implications of this maximum for each species depend on the current status of the stock and the fishery dependent on it.

**Rejected Alternative 1:** Status quo -- Maintain the target date of January 1, 2000 that was established in Amendment 1 for rebuilding the red snapper stock to 20 percent SPR.

For red snapper, this target is achievable only through the imposition of stringent restrictions on both the directed red snapper and shrimp fisheries. These restrictions should commence by 1991 and remain throughout the rebuilding period. In an earlier analysis of impacts, it was estimated that closure of the directed red snapper fishery and a 10-month closure of the shrimp fishery starting 1991 would result in net losses ranging from \$44 million to \$278 million. The lower number corresponds to cooperative state and federal closures while the higher one corresponds to closure of only the EEZ. These losses would be borne by the recreational red snapper anglers and the ex-vessel sectors of both commercial red snapper and shrimp fisheries. No estimates of impacts on the processing and trade sectors or on the consumers were calculated.

Two recent developments have complicated the attainment of this target. First, the Council recently proposed under a regulatory amendment a TAC of 2.0 MP commercial quota and a 2 fish recreational bag limit for the directed fishery for 1991. Second, Congress recently amended the Magnuson Act to preclude the imposition of any restrictive measures on the shrimp fishery to conserve red snapper until 1994. Given these new policy developments, the balancing of the rebuilding target with economic consequences is practically impossible to achieve for this alternative.

The achievement of the rebuilding target for other reef fish species is not determinable in the absence of projections regarding the status of the stocks. Consequently, the program of balancing the rebuilding target with economic consequences of potential measures cannot be addressed.

**Rejected Alternative 2.** Establish a target date to be some multiple, for example 1.0 - 1.5, of the length of a stock's modeled age structure. This alternative requires the selection of a specific year or range of years for a target date based on the characteristics of the population model used to project a species recovery period. For red snapper, which has a model age structure of 12 years (age classes 0,1,2, . . . , 11+), this alternative would establish a target date range of 2002 - 2008, equivalent to 1 - 1.5 times the age structure or 12 - 18 years from the baseline date of 1990.

Relative to status quo, this option provides the Council with greater flexibility in balancing the achievement of the rebuilding target and the economic consequences of regulatory measures. This option automatically shortens or lengthens the rebuilding period as the fishery models change due to inclusion of more or better information. Currently, only red snapper has been adequately modeled. Specifying the rebuilding target for all reef fish species to coincide with that for red snapper may not be appropriate. This option, on the other hand, offers flexibility in the choice of a rebuilding period for each of the reef fish species, particularly as more information about these species becomes available.

Extension of the rebuilding period for stock recovery would allow a TAC that is close to current harvest levels. In this way, the short-term profitability of the commercial sector and the benefit level of the recreational sector may not be substantially affected. This, of course, means that higher benefits from a fully recovered stock are postponed.

**Rejected Alternative 3.** Have no target date for rebuilding overfished reef fish stocks.

Among the proposed alternatives, this option is the least restrictive from the standpoint of the stock rebuilding measures to be adopted by the Council. It does not conform, however, to NMFS guidelines with respect to the rebuilding of an overfished stock. Without a target date, the 20 percent SPR target assumes the role of a broad guide for fishery management. Optimum yield in this case may or may not be attained depending on the nature of management measures adopted. Under this option, the Council has wider latitude in designing its management strategy to take into account short-term negative impacts on the fishery participants. However, if the short-term negative impacts are not balanced with stock recovery rates, long-term benefits may be forgone.

#### 5.1.2. Comparative Analysis of Preferred and Rejected Measures for Red Snapper

There are five measures compared. These are measures that could be imposed under: a) Preferred Option 1; b) Preferred Option 3; c) Rejected Option 1; d) Rejected Option 2a (lower limit); and, e) Rejected Option 2b (upper limit). Preferred Option 2 and Rejected Option 3 are too general, and are therefore not included in the ensuing comparison. The same technique as in previous analysis (Regulatory Impact Analysis for the Regulatory Amendment to the Reef Fish FMP, 1990) is used here in estimating economic impacts.



The use of Preferred Option 3 for comparison purposes needs some clarification. As proposed, this option merely imposes an upper limit on the choice of a recovery period. Currently, 1.5 times the generation time for red snapper means that the terminal period for the stock's recovery is 2011 if the maximum were chosen. The analysis that follows simply compares the impacts of 2011 versus 2007 as the terminal year for stock recovery period. Thus, the comparison should not be construed to mean that Preferred Option 3 is an alternative to Preferred Option 1.

Table 1 gives a description of the alternatives analyzed. The basis for comparison is a set of measures consisting of the following TAC: 2.0 MP commercial quota and 2 fish recreational bag limit. This TAC is maintained throughout the policy period (1992-2020). All alternatives assume this TAC for 1991 as well as a 50 percent reduction in bycatch starting in 1994. The baseline scenario was chosen to conform to the Council's proposed TAC for red snapper -- as of the date of this document. Although the actual TAC for 1991 is still under deliberation by the Council and may differ from the previous proposal, it is worth noting that the choice of a baseline scenario does not affect the relative ranking of compared options. In earlier analysis, 2015 was used as the terminal year for all alternatives. For the present analysis, 2020 was chosen in order to allow at least about 10 years of less restrictive measures for each alternative to better quantify potential benefits.

During the rebuilding period, the TAC chosen for each target date alternative is the maximum possible that would enable the achievement of at least a 20 percent SPR by the end of the rebuilding period. Thereafter, a quota of 6 MP each for the commercial and recreational sectors is assumed. This assumed quota is the allowable maximum to maintain an SPR level of no less than 20 percent under the assumption of a 50 percent bycatch reduction. No consideration is given to the possible impacts of the 50 percent bycatch reduction on the shrimp fishery participants. Additionally, significant changes in the market for red snapper are ruled out.

In terms of total net benefit changes, longer rebuilding periods are associated with higher benefits (Table 2). The major reason for this is that higher TACs are permitted with longer rebuilding periods. Additionally, the allowable TAC after SPR reaches 20 percent is the same for all options, since each option assumes the same level of bycatch reduction. It may also be observed from Table 2 that the long-term impacts of options with shorter rebuilding periods (Rejected Options 1 and 2a) are sensitive to the discounting rate used: long-term impacts are positive at a lower discounting rate and negative at a higher discounting rate. This sensitivity arises because higher discounting rates place more weight on short-term losses and less weight on long-term benefits. Among the options compared, the Preferred Option occupies a middle ranking in both short- and long-term impacts. Relative to the baseline scenario, the five-year impacts of the Preferred Option are zero due to the equality of the TAC under both scenarios. Its long-term (1992-2020) impacts range from about \$30 million to \$82 million depending on the discounting rate used.

Table 3 shows the differential impacts of the different options on the commercial and recreational sectors of the red snapper fishery. For the commercial harvest (ex-vessel) sector, the ranking of options is invariant to the discounting rate used. At a 5 percent discounting rate, the highest net benefit change of \$60.6 million corresponds to the rebuilding period that ends in 2008. Shorter and longer rebuilding periods have lower net benefit changes. At a 10 percent discounting rate, the highest net benefit change of \$26.1 million occurs with the rebuilding period that also terminates in the year 2008. The recreational sector, on the other hand, experiences invariably increasing net benefit changes with extended rebuilding periods, regardless of the discounting rate. For the recreational fishery, the highest net benefit change of \$30.8 million (at 10 percent

discounting rate) or \$55.1 million (at 5 percent discounting rate) is associated with the longest rebuilding period (2011). The Preferred Option has middle ranking for both the commercial and recreational sectors.

As can be deduced from Table 2, the Preferred Option would not have an annual impact of \$100 million or more on fishery participants. In addition, it is likely to impact only a few number of fishery participants relative to the baseline scenario. In fact if the base scenario materializes pursuant to the regulatory amendment currently under deliberation, the five-year impact of the Preferred Option would be nil. The long-term economic impacts would be positive. It may also be noted that the likely impacts of the options considered would be confined to the reef fish fishery within the Gulf region. Spillover effects on adjacent fishing areas, particularly the area under the jurisdiction of the South Atlantic Council would be minimal, and would be mainly indirect through the regulation's effects on market price for reef fish. A reduction in harvest in the Gulf could raise price high enough to induce more intensive fishing in the South Atlantic area. This increase effort could be partially addressed by restrictive regulations that may be imposed in that area.

The Council selected the Preferred Option because this option offered the best balance among biological conservation, short-term negative economic impacts, and long-term positive economic impacts on fishery participants.

## 5.2. Speckled Hind

Preferred Alternative: Transfer the speckled hind (Kitty Mitchell) from the shallow-water quota category.

Apparently, speckled hind has been misclassified as part of the shallow water grouper species. There are several implications of this misclassification. First, the shallow-water quota may have been overcounted. Second, landings of this species for the period of the ban on harvest of shallow-water groupers are foregone. The extent of quota overcounting as well as the extent of the foregone landings is not known. However, foregone revenues to the shallow-water and deepwater fishermen ensued from this misclassification. This preferred alternative attempts to redress the situation. In the sense that revenues have already been foregone, this alternative can only prevent further economic loss in the succeeding fishing year. Although it is possible that fish not harvested this year may lower the cost of fishing in the following year, a significant level of mortality of the caught and released fish would probably prevent it. At any rate, this alternative is likely to result in benefits relative to the status quo.

Rejected Alternative: Status quo -- Maintain speckled hind as a shallow-water grouper. category.

Maintaining the present categorization of speckled hind would mean a continuing reduction in benefits to the users of this resource.

## 6. CONCLUSION

A discussion along general lines was attempted on the potential impacts of the alternatives as they

apply to all reef fish species under management. However, more specific analysis of impacts was performed as the measures relate to red snapper. In comparing the different options, it was determined that the Preferred Option occupies a middle ranking in terms of generating benefits to the economy. The net effects on the fishery participants of each option do not exceed \$100 million annually. Relative to the base case scenario, the Preferred Option is not expected to significantly affect a substantial number of fishery participants. The impacts of this plan amendment on adjacent fishing area is expected to be minimal.

## 7. REFERENCES

Gulf of Mexico Fishery Management Council. 1990. Regulatory impact analysis for the regulatory amendment to the Reef Fish Fishery Management Plan. Unpublished report available from the Gulf of Mexico Fishery Management Council, Suite 881, Lincoln Center, 5401 West Kennedy Boulevard, Tampa, Florida 33609.

Reef Fish Scientific Assessment Panel. 1990. Final report of the reef fish assessment panel, June 1990. Panel meeting held at National Marine Fisheries Service, Miami Laboratory, June 19-21, 1990. Unpublished report available from the Gulf of Mexico Fishery Management Council, Suite 881, Lincoln Center, 5401 West Kennedy Boulevard, Tampa, Florida 33609.

Kemmerer, Andrew J. 1990. Letter to Mr. Wayne Swingle. Available from the Gulf of Mexico Fishery Management Council, Suite 881, Lincoln Center, 5401 West Kennedy Boulevard, Tampa, Florida 33609.

Table 1

## DEFINITION OF MANAGEMENT OPTIONS FOR RED SNAPPER

Management Option	Commercial Fishery	Recreational Fishery	Bycatch Reduction	Target Year SPR=20%
Baseline	2.0 MP quota for 1992-2020	2 fish bag for 1992-2020	50% for 1994+	2007
Preferred Option 1	2.0 MP quota for 1992-2007 6.0 MP quota for 2008+	2 fish bag for 1992-2007 6.0 MP quota for 2008+	50% for 1994+	2007
Preferred Option 3	2.95 MP quota for 1992-2011 6.0 MP quota for 2012+	6 fish bag for 1992-2011 6.0 MP quota for 2012+	50% for 1994+	2011
Rejected Option 1	Closure for 1992-2001 6.0 MP quota for 2002+	Closure for 1992-2001 6.0 MP quota for 2002+	50% for 1994+	2001
Rejected Option 2a	2.0 MP quota for 1992-1993 Closure for 1994-2002 6.0 MP quota for 2003+	2 fish bag for 1992-1993 Closure for 1994-2002 6.0 MP quota for 2003+	50% for 1994+	2002
Rejected Option 2b	2.57 MP quota for 1992-2008 6.0 MP quota for 2009+	4 fish bag for 1992-2008 6.0 MP quota for 2009+	50% for 1994+	2008

Notes

1. The policy period is 1992-2020. The starting year was chosen as it was deemed that measures under this plan amendment would be adopted starting in 1992. The terminal year (2020) was chosen in order to allow at least about ten years of less restrictive management regime under each option.
2. The baseline TAC was chosen in consideration of an earlier Council proposal to impose such TAC level for the 1991 fishing year. All options assume the baseline TAC for 1991. The base case differs from the preferred option only in the sense that the former maintains the same TAC throughout the policy period while the latter assumes a 6 MP quota each for the commercial and recreational sectors beginning in 2008, a year after the 20 percent SPR is reached. All options assume a 6 MP quota each for the commercial and recreational sectors noting the fact that this is the maximum allowable harvest that maintains the SPR level at 20 percent when a 50% bycatch reduction is realized.
3. Preferred Option 3 is considered as an alternative only in the sense that it offers an option to extend the recovery period to about 2011 (i.e., 1.5 times the biological generation time for red snapper).

Table 2

APPROXIMATE TOTAL CHANGES IN NET BENEFITS TO THE  
RED SNAPPER FISHERY  
(Million Dollars)

Baseline: 2.0 MP Commercial Quota, 2 Fish Recreational  
Bag Limit in 1992-2020, 50 Percent Reduction  
in Bycatch in 1994+

Period	Preferred Option -2007-	Preferred Option 3 -2011-	Rejected Option 1 -2001-	Rejected Option 2a -2002-	Rejected Option 2b -2008-
5 Percent Discounting Rate					
1992-1996	0.0	21.7	- 48.0	- 27.8	11.6
1992-2011	30.7	55.0	0.5	1.4	52.4
1992-2020	82.3	106.5	52.1	53.0	104.0
10 Percent Discounting Rate					
1992-1996	0.0	19.2	- 42.0	- 23.2	10.3
1992-2011	13.0	39.9	- 25.8	- 18.6	31.5
1992-2020	29.5	56.3	- 9.4	- 2.2	48.0

Notes

1. The policy period is 1992-2020. The starting year was chosen as it was deemed that measures under this plan amendment would be adopted starting in 1992. The terminal year (2020) was chosen in order to allow at least about ten years of less restrictive management regime under each option.
2. The baseline TAC was chosen in consideration of an earlier Council proposal to impose such TAC level for the 1991 fishing year. All options assume the baseline TAC for 1991. The base case differs from the preferred option only in the sense that the former maintains the same TAC throughout the policy period while the latter assumes a 6 MP quota each for the commercial and recreational sectors beginning in 2008, a year after the 20 percent SPR is reached. All options assume a 6 MP quota each for the commercial and recreational sectors noting the fact that this is the maximum allowable harvest that maintains the SPR level at 20 percent when a 50% bycatch reduction is realized.
3. Preferred Option 3 is considered as an alternative only in the sense that it offers an option to extend the recovery period to about 2011 (i.e., 1.5 times the biological generation time for red snapper).

Table 3

APPROXIMATE CHANGES IN NET BENEFITS TO THE COMMERCIAL AND RECREATIONAL  
RED SNAPPER FISHERY  
(Million Dollars)

Baseline: 2.0 MP Commercial Quota, 2 Fish Recreational Bag Limit in 1992-2020,  
50 Percent Reduction in Bycatch in 1994+

Period	Preferred Option -2007-		Preferred Option 3 -2011-		Rejected Option 1 -2001-		Rejected Option 2a -2002-		Rejected Option 2b -2008-	
	Comm'l	Rec'l	Comm'l	Rec'l	Comm'l	Rec'l	Comm'l	Rec'l	Comm'l	Rec'l
	5 Percent Discounting Rate									
1992-1996	0.0	0.0	10.4	11.3	- 28.8	- 19.2	- 16.7	- 11.1	4.9	6.7
1992-2011	19.6	11.1	16.2	38.8	- 3.3	3.8	- 1.5	2.9	25.4	27.0
1992-2020	54.8	27.5	51.4	55.1	31.9	20.2	33.7	19.3	60.6	43.4
	10 Percent Discounting Rate									
1992-1996	0.0	0.0	9.2	10.0	- 25.2	- 16.8	- 13.9	- 9.3	4.4	5.9
1992-2011	8.3	4.7	14.3	25.6	- 17.9	- 7.9	- 12.9	- 5.7	14.9	16.6
1992-2020	19.5	10.0	25.5	30.8	- 6.7	- 2.7	- 1.7	- 0.5	26.1	21.9

Notes

1. The policy period is 1992-2020. The starting year was chosen as it was deemed that measures under this plan amendment would be adopted starting in 1992. The terminal year (2020) was chosen in order to allow at least about ten years of less restrictive management regime under each option.
2. The baseline TAC was chosen in consideration of an earlier Council proposal to impose such TAC level for the 1991 fishing year. All options assume the baseline TAC for 1991. The base case differs from the preferred option only in the sense that the former maintains the same TAC throughout the policy period while the latter assumes a 6 MP quota each for the commercial and recreational sectors beginning in 2008, a year after the 20 percent SPR is reached. All options assume a 6 MP quota each for the commercial and recreational sectors noting the fact that this is the maximum allowable harvest that maintains the SPR level at 20 percent when a 50% bycatch reduction is realized.
3. Preferred Option 3 is considered as an alternative only in the sense that it offers an option to extend the recovery period to about 2011 (i.e., 1.5 times the biological generation time for red snapper).

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Part 641

[Docket No. ]

RIN

Reef Fish Fishery of the Gulf of Mexico

AGENCY: National Marine Fisheries Service (NMFS), NOAA,  
Commerce.

ACTION: Proposed rule.

SUMMARY: NOAA issues this proposed rule to implement Amendment 3 to the Fishery Management Plan for the Reef Fish Resources of the Gulf of Mexico (FMP). This proposed rule would remove speckled hind from the species managed as shallow-water groupers (all groupers other than jewfish and deep-water groupers) and add it to the species managed as deep-water groupers (yellowedge, misty, warsaw, and snowy grouper). In addition, Amendment 3 proposes to (1) extend the target date for rebuilding the red snapper resource in the Gulf of Mexico from January 1, 2000, to January 1, 2007; and (2) add to the management measures that may be implemented or modified via the FMP's framework procedure the setting of target dates for rebuilding overfished reef fish stocks, with an upper limit for the rebuilding periods not exceeding 1.5 times the generation time of the species under consideration. The intended effects of this rule and

Amendment 3 are to place speckled hind in the species group to which it properly belongs, to provide the Council with a target date for red snapper that is attainable, and to provide the Council with necessary flexibility in the rebuilding program for reef fish.

DATES: Written comments must be received [Insert date 45 days after date of filing at the Office of the Federal Register].

ADDRESSES: Requests for copies of Amendment 3, which includes a regulatory impact review/environmental assessment (RIR/EA), and a minority report that objects to the proposed upper limit for the rebuilding periods should be sent to the Gulf of Mexico Fishery Management Council, 5401 West Kennedy Boulevard, Suite 881, Tampa, FL 33609.

Comments on the proposed rule should be sent to Robert A. Sadler, Southeast Region, National Marine Fisheries Service, 9450 Koger Boulevard, St. Petersburg, FL 33702.

FOR FURTHER INFORMATION CONTACT: Robert A. Sadler, 813-893-3722.

SUPPLEMENTARY INFORMATION: The reef fish fishery of the Gulf of Mexico is managed under the FMP prepared by the Council and its implementing regulations at 50 CFR part 641, under the authority of the Magnuson Fishery Conservation and Management Act (Magnuson Act), 16 U.S.C. 1801 et seq.

Speckled Hind



The implementing regulations include speckled hind (Epinephelus drummondhayi) as a shallow-water grouper. After the commercial quota for shallow-water grouper was reached and the commercial shallow-water grouper fishery was closed on November 8, 1990, a significant increase was noted in the catch of speckled hind by vessels targeting deep-water groupers. Speckled hind reportedly represented from 30 to 40 percent of the groupers being taken after the closure. Because speckled hind are taken from relatively deep water, there is a high rate of mortality when they are released. Thus, during the closure, the resource was being wasted.

The Council found that the waste of speckled hind owing to its inclusion in the shallow-water grouper category constituted an emergency. The Secretary concurred and promulgated an emergency rule, effective for 90 days commencing December 11, 1990, transferring speckled hind from the shallow-water to the deep-water grouper category. Amendment 3 would make that transfer permanent.

The categories used in the FMP reflect a bathymetric association for the shallow- and deep-water groupers. However, no specific depth zone was established to separate the two groups. The groups are principally distinguished by ecological distribution, with the deep-water groupers generally found further offshore in deeper waters beyond reef areas. Speckled hind are found on the outer reefs,

mainly at depths of 100 fathoms or greater, and occur as a significant component of the deep-water fishery.

The magnitude of catches of speckled hind during the shallow-water grouper closure in a fishery that was not taking any appreciable amounts of other shallow-water groupers strongly indicates that speckled hind is not properly classified as shallow-water groupers.

#### Change in Target Date

As part of a rebuilding program, Amendment 1 to the FMP established a target date of January 1, 2000, for attaining a spawning potential ratio (SPR) for reef fish resources of 20 percent. (In Amendment 1, the Council's goal was expressed in terms of a spawning stock biomass per recruit ratio (SSBR) of 20 percent. Both SPR and SSBR refer to the same index of population status. SPR is technically a more correct reference to spawning stock index and is used in the most recent stock assessment.)

Because of the current depleted status of the red snapper resource, closure of the red snapper directed fishery would have to be imposed immediately and significant reductions in the harvest of juvenile red snapper as bycatch in the shrimp trawl fishery would have to be imposed by January 1, 1993, in order to meet the SPR goal by 2000. A recent amendment to the Magnuson Act, Pub. L. 101-627, prohibits mandatory reductions in the shrimp trawl bycatch of red snapper before January 1, 1994. However, even with a

prohibition of directed red snapper fishing commencing January 1, 1991, and a total reduction of shrimp trawl bycatch of red snapper commencing January 1, 1994, the SPR goal would not be met by 2000. The Council is acutely aware that immediate action is required to reduce the fishing mortality of red snapper but is unable to propose any management measures for red snapper under the framework procedure established in Amendment 1 that are consistent with the time frame for attaining the SPR objective of the FMP.

Accordingly, Amendment 3 proposes to extend the target date for red snapper to January 1, 2007. The target date for other species of reef fish would not be changed. Although the SPR goal could be reached in 2001 with a complete closure of the directed red snapper fishery beginning in 1991 and a 50 percent reduction in the shrimp trawl bycatch beginning in 1994, the Council chose to extend the target date to 2007 and allow catches to continue, but at a reduced rate, to lessen the social and economic burdens associated with a complete closure of the red snapper fishery. A reduced recreational bag limit and commercial quota, implemented commencing in 1991, in combination with a 50 percent reduction of shrimp trawl bycatch of juvenile red snapper after January 1, 1994, will enable attainment of the SPR objective by 2007.

## Change in Framework Procedure

The FMP, as amended, contains a procedure for specification of total allowable catch and adjustment of management measures. The target dates for rebuilding reef fish stocks are not included among the management measures that may be adjusted via the framework procedure. Lack of flexibility in this regard has contributed to significant delays in implementing necessary conservation measures on red snapper.

The dynamics of the reef fish resources, paucity of biological data on the resource, paucity of economic and social data on fishermen, and the difficulties in making long-term predictions militate against fixed target dates. Accordingly, Amendment 3 proposes to add target dates to the management measures that may be changed under the framework procedure, with the constraint that a target date may not provide for a rebuilding period that exceeds 1.5 times the generation time for the species being considered. Generation time is the age at which the average female fish achieves half of her expected lifetime egg production. This constraint provides an upper limit for the selection of an appropriate target date.

As with all changes recommended by the Council via the framework procedure, the changes in target dates would have to be consistent with the objectives of the FMP, the

national standards, and other applicable law and would be available for public comment.

No regulatory changes are proposed to add changes in target dates to the management measures that may be implemented or modified via the framework procedure or to implement the change in the target date for red snapper. However, the Council is expected to submit a regulatory amendment under the framework procedure that (1) will reduce the harvest of red snapper in the directed fishery commencing in 1991; and (2) in combination with future actions, will attain the SPR objective by 2007.

Additional information on the proposed transfer of speckled hind to the shallow-water grouper category, the proposed change in the target date for rebuilding the red snapper resource, and the proposed adjustment, within limitations based on the generation time for each species, of target dates via the framework procedure are contained in Amendment 3. Additional information on the objections to the limitations on target dates via the framework procedure are contained in the minority report. The availability of Amendment 3 and the minority report was announced in the FEDERAL REGISTER on February , 1991 (56 FR ).

#### Classification

Section 304(a)(1)(D)(ii) of the Magnuson Act, as amended by Public Law 99-659, requires the Secretary of Commerce (Secretary) to publish regulations proposed by a

Council within 15 days of receipt of an FMP amendment and regulations. At this time, the Secretary has not determined that Amendment 3, which this proposed rule would implement, is consistent with the national standards, other provisions of the Magnuson Act, and other applicable law. The Secretary, in making that determination, will take into account the data, views, and comments received during the comment period.

This proposed rule is exempt from the procedures of E.O. 12291 under section 8(a)(2) of that order. It is being reported to the Director, Office of Management and Budget, with an explanation of why it is not possible to follow the procedures of that order.

The Under Secretary for Oceans and Atmosphere, NOAA, has initially determined that this proposed rule is not a "major rule" requiring the preparation of a regulatory impact analysis under E.O. 12291. This proposed rule, if adopted, is not likely to result in an annual effect on the economy of \$100 million or more; a major increase in costs or prices for consumers, individual industries, Federal, state, or local government agencies, or geographic regions; or a significant adverse effect on competition, employment, investment, productivity, innovation, or the ability of U.S.-based enterprises to compete with foreign-based enterprises in domestic or export markets.

The Council prepared a regulatory impact review (RIR) which concludes that this rule, if adopted, over the short term, would have negligible economic effects on the commercial and recreational sectors of the red snapper fishery. Over the long term, positive benefits to the commercial and recreational sectors of the red snapper fishery will be approximately \$29.5 million to \$82.5 million at 10 percent and 6 percent discount rates, respectively. In addition, the RIR concludes that this rule, if adopted, would affect few participants in the fishery. Accordingly, the General Counsel of the Department of Commerce certified to the Chief Counsel for Advocacy of the Small Business Administration that the proposed rule, if adopted, would not have a significant economic impact on a substantial number of small entities; and a regulatory flexibility analysis was not prepared.

The Council prepared an environmental assessment (EA) that discusses the impact on the environment as a result of this rule. A copy of the EA may be obtained at the address listed above and comments on it are requested.

The Council has determined that this rule will be implemented in a manner that is consistent to the maximum extent practicable with the approved coastal zone management programs of Alabama, Florida, Louisiana, and Mississippi. Texas does not participate in the coastal zone management program. These determinations have been submitted for

review by the responsible state agencies under section 307 of the Coastal Zone Management Act.

This proposed rule does not contain a collection-of-information requirement for purposes of the Paperwork Reduction Act.

This proposed rule does not contain policies with federalism implications sufficient to warrant preparation of a federalism assessment under E.O. 12612.

List of Subjects in 50 CFR Part 641

Fisheries, Fishing, Reporting and recordkeeping requirements.

Dated:

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For the reasons set forth in the preamble, 50 CFR part 641 is proposed to be amended as follows:

PART 641 -- REEF FISH FISHERY OF THE GULF OF MEXICO

1. The authority citation for part 641 continues to read as follows:

Authority: 16 U.S.C. 1801 et seq.

2. In § 641.25, paragraph (b) is revised to read as follows:

§ 641.25 Commercial quotas.

\* \* \* \* \*

(b) Yellowedge, misty, warsaw, and snowy grouper and speckled hind (deep-water groupers), combined - 1.8 million pounds.

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